

## ABSTRACT OF THE DISCLOSURE

A variable compensation circuit for capacitive adapters is provided and includes an input connector for receiving a signal output from a capacitive adapter positioned within an electric near field emitted from a component of an engine ignition system, an output connector for  
5 outputting a signal output from the variable compensation circuit, a capacitive divider circuit portion disposed in series between the input and output connectors, the capacitive divider circuit portion comprising at least one of a variable capacitor and a plurality of fixed capacitors. The variable compensation circuit also includes a switching element configured to enable at least one of a selection and de-selection of the plurality of fixed capacitors and adjustment of a variable  
10 capacitor to provide one of a plurality of selected capacitance reactance ratios.